

CALIFORNIA COASTAL COMMISSION

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Staff: ALB-LB
Staff Report: July 23, 2003
Hearing Date: August 6-8, 2003
Commission Action:



Th 14c

STAFF REPORT: APPEAL **DE NOVO**

LOCAL GOVERNMENT: County of Orange

LOCAL DECISION: Approval with Conditions

APPEAL NUMBER: A-5-NPC-03-141

APPLICANT: California Department of Transportation (Caltrans)

AGENT: Chris Flynn, Environmental Planner

PROJECT LOCATION: Within the right-of-way on both sides of State Route 1 (Pacific Coast Highway) between Los Trancos Creek and Muddy Creek in the Crystal Cove area of the Newport Coast Planned Community, Orange County

PROJECT DESCRIPTION: Appeal of County of Orange approval of construction of stormwater drainage improvements, including new pipes, inlets and the creation of biofiltration swales adjacent to Pacific Coast Highway.

APPELLANTS: Orange County Coastkeeper, Coastal Commissioners Toni Iseman and Sara Wan

SUMMARY OF STAFF RECOMMENDATION

At a public hearing on May 6, 2003, the Commission determined that **a substantial issue existed** with respect to the local government's approval of the proposed development on the grounds that the locally approved development does not conform to the County of Orange Newport Coast certified Local Coastal Program (LCP) and the Chapter 3 public access policies of the Coastal Act. More specifically, the Commission found that the locally approved coastal development permit and the appeal thereof raised a substantial issue of consistency with the environmentally sensitive habitat area (ESHA) policies of the certified LCP, as it would allow an unspecified amount of untreated runoff from Pacific Coast Highway to enter the Crystal Cove Area of Special Biological Significance (ASBS). This issue has since been resolved, as will be explained in the staff report. In addition, the locally approved permit was found to raise a substantial issue of consistency with the Chapter 3 public access policies of the Coastal Act due to the fact that polluted runoff entering the ocean potentially results in beach closures, thereby adversely affecting the public's ability to access and utilize coastal resources.

Staff recommends that the Commission, after a public hearing, **approve a de novo coastal development permit** for each component of the proposed development with seven (7) special conditions requiring: 1) submittal of a consolidated Construction Best Management

Practices Plan; 2) submittal of a consolidated Water Quality Management Plan (WQMP); 3) submittal of an inspection plan and restoration agreement for abandoned drainage facilities; 4) timing of maintenance activities to avoid biological resources; 5) staging to avoid biological resources; 6) timing of maintenance activities to avoid public access impacts; and 7) submittal of an archeological monitoring plan

SUBSTANTIVE FILE DOCUMENTS:

1. Record for Local Coastal Development Permit No. PA02-0112
2. County of Orange Newport Coast Certified Local Coastal Program
3. Crystal Cove State Park Certified Public Works Plan
4. Caltrans Statewide Storm Water Quality Practice Guidelines (May 2003)
5. Caltrans Storm Water Quality Handbooks (March 2003)

EXHIBITS:

1. Vicinity Map
 2. Location Map
 3. Project Plans
 4. CASQA Vegetated Swale Data
 5. Caltrans Seed Mix List
 6. Caltrans Maintenance Guidelines for Bioswales
 7. Caltrans Graphics Depicting Runoff Direction and Treatment Percentage
 8. Letter from RWQCB dated September 27, 2002
 9. Applicable Newport Coast LCP Policies
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I. MOTIONS AND RESOLUTIONS:

A. MOTION AND RESOLUTION FOR DE NOVO PERMIT NO. A-5-NPC-03-141

The staff recommends that the Commission make the following motion and adopt the following resolution:

Motion: *I move that the Commission approve CDP No. A-5-NPC-03-141 pursuant to the staff recommendation.*

Staff Recommendation:

Staff recommends a **YES** vote. Passage of this motion will result in adoption of the following resolution and findings. The motion passes only by affirmative vote of majority of the Commissioners present.

Resolution to Approve CDP No. A-5-NPC-03-141:

The Commission hereby **GRANTS** a permit, subject to the conditions below, for the proposed development on the grounds that, as conditioned, the proposed development, located between the first public road and the sea, conforms to the requirements of the Newport Coast certified Local Coastal Program and to the public access and public recreation policies of Chapter 3 of the Coastal Act, and that the development will not have any adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS:

1. Protection of Water Quality – During Construction
 - A. **AT LEAST THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION**, the applicant shall submit, for the review and approval of the Executive Director, a consolidated Construction Best Management Practices Plan for the project site, prepared by a licensed professional, and shall incorporate erosion, sediment, and chemical control Best Management Practices (BMPs) designed to minimize to the maximum extent practicable the adverse impacts

associated with construction to receiving waters. The plan shall include the following requirements:

- (i) No construction materials, debris, or waste shall be placed or stored in a manner where it may be subject to wave, wind, rain, or tidal erosion and dispersion.
 - (ii) Any and all debris resulting from construction and demolition activities shall be removed from the project site within 24 hours of completion of demolition and construction. Construction and demolition debris and sediment shall be removed from work areas each day that construction or demolition occurs to prevent the accumulation of sediment and other debris that could be discharged into coastal waters. All demolition/construction debris and other waste materials removed from the project site shall be disposed of or recycled in compliance with all local, state and federal regulations. No debris shall be placed in coastal waters. If a disposal site is located in the coastal zone, the site must have a coastal development permit allowing debris disposal or an amendment to this permit shall be required before disposal can take place.
 - (iii) Erosion control/sedimentation Best Management Practices (BMPs) shall be used to control dust and sedimentation impacts to coastal waters during construction activities. BMPs shall include, but are not limited to: placement of sand bags around drainage inlets to prevent runoff/sediment transport into the storm drain system and Pacific Ocean.
 - (iv) All construction materials, excluding lumber, shall be covered and enclosed on all sides, and kept as far away from a storm drain inlet and receiving waters as possible.
 - (v) A copy of the Storm Water Pollution Prevention Plan (SWPPP) and any amendments thereto, prepared in accordance with the Caltrans SWPPP/WPCP Preparation Manual dated March 1, 2003.
- B. The required Construction Best Management Practices Plan for the project site shall also include the following BMPs designed to prevent spillage and/or runoff of construction and demolition-related materials, sediment, or contaminants associated with construction activity. The applicant shall:
- (i) Develop and implement spill prevention and control measures and shall ensure the proper handling, storage, and application of petroleum products and other construction materials. These shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any

spillage of gasoline or related petroleum products or contact with runoff. It shall be located as far away from the receiving waters and storm drain inlets as possible.

- (ii) Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems. Washout from concrete trucks shall be disposed of at a controlled location, more than fifty feet away from a storm drain, open ditch or surface waters. Any residual cement on the ground shall be removed and properly disposed.
 - (iii) Provide and maintain adequate disposal facilities for solid waste, including excess concrete, produced during construction.
 - (iv) Provide and maintain temporary sediment basins (including debris basins, desilting basins or silt traps), temporary drains and swales, sand bag barriers, wind barriers such as solid board fence, snow fences or hay bales, and silt fencing.
 - (v) Stabilize any stockpiled fill with geofabric covers or other appropriate cover, and close and stabilize open trenches as soon as possible.
 - (vi) Implement the approved Construction Best Management Practices Plan on the project sites prior to and concurrent with the construction operations. The BMPs shall be maintained throughout the development process.
- C. The Construction Best Management Practices Plan approved by the Executive Director pursuant to this condition shall be attached to all final construction plans. The permittee shall undertake the approved development in accordance with the approved Construction Best Management Practices Plan. Any proposed changes to the approved Construction Best Management Practices Plan shall be reported to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved plan shall occur without a Commission-approved permit amendment unless the Executive Director determines that no amendment is required.

2. Protection of Water Quality – Project Design & Post Construction

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, a consolidated Water Quality Management Plan (WQMP) for the post-construction project site, prepared by a licensed water quality professional, and, as proposed by the applicant, shall incorporate structural and non-structural Best Management Practices (BMPs)

into the WQMP designed to reduce the pollutant load of, and minimize any increases in volume and velocity of, storm water leaving the developed site. The plan shall be in substantial conformance with the aspect(s) of the submitted project plans in which it states that approximately 61% of runoff leaving Pacific Coast Highway between Los Trancos Creek and Muddy Creek shall be treated (by directing it to structural BMPs designed in accordance with paragraph A(i), below) prior to discharge. The plan shall also be in substantial conformance with the following requirements:

A. Water Quality Management Plan

- (i) As proposed by the applicant, post-construction structural BMPs (or suites of BMPs) should be designed to treat, infiltrate or filter the amount of storm water runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.
- (ii) As proposed by the applicant, runoff from the highway shall be collected and directed through an appropriate structural BMP or system of BMPs. The filter elements shall be designed to: 1) trap sediment, particulates and other solids, and 2) remove or mitigate contaminants through filtration and/or biological uptake. The drainage system shall also be designed to convey and discharge runoff in excess of this standard from the site in a non-erosive manner.
- (iii) As proposed by the applicant, the applicant shall regularly collect and remove litter and debris from the highway in order to prevent dispersal of pollutants that might collect on the highway surface.

B. Inspection and Maintenance

The Water Quality Management Plan (WQMP) shall include inspection and maintenance provisions in substantial conformance with the following requirements:

- (i) All BMPs shall be operated, inspected, and maintained for the life of the project and at a minimum, all structural BMPs shall be inspected, and where necessary, cleaned out and repaired, at the following minimum frequencies 1) prior to October 15th each year; 2) during each month between October 15th and April 15th of each year and, 3) at least twice during the dry season (between April 16 and October 14).

- (ii) Debris and other water pollutants removed from structural BMP(s) during clean-out shall be contained and disposed of in a proper manner.
 - (iii) It is the applicant's responsibility to maintain the drainage system and the associated structures and BMPs according to manufacturer's specification.
 - C. The permittee shall undertake and maintain the approved development in accordance with the WQMP approved by the Executive Director pursuant to this condition. Any proposed changes to the approved WQMP shall be reported to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved WQMP shall occur without a Commission-approved amendment unless the Executive Director determines that no amendment is required.
- 3. Abandoned Facilities Inspection/Maintenance Plan and Restoration Agreement
 - A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and approval of the Executive Director, in consultation with the California State Parks Department:
 - (i) A plan for inspection and maintenance of all abandoned Caltrans storm drain facilities located seaward of Pacific Coast Highway at Crystal Cove State Park between Los Trancos Creek and Muddy Creek. The plan shall include the following:
 - A schedule for periodic inspection of the abandoned facilities and surrounding outlet areas to determine their condition; and
 - An outline for maintenance activities to be implemented if facilities are causing adverse impacts such as erosion or slope instability. Maintenance may include debris removal and rock retrieval.
 - (ii) An agreement to carry out future restoration of the area occupied by abandoned Caltrans storm drain facilities located seaward of Pacific Coast Highway at Crystal Cove State Park between Los Trancos Creek and Muddy Creek. The agreement shall include an analysis and implementation schedule for restoration of each outlet area to pre-existing (prior to installation of the outlet) conditions. Restoration may consist of removal of riprap and revegetation with native species appropriate to each site. The analysis shall evaluate the following: potential for removal and off-site disposal of abandoned drainage facilities where feasible based on geotechnical and biological constraints; native revegetation of the outlet sites; monitoring plan to ensure proper plant establishment; and staging for

restoration activities. The restoration plan shall be implemented within five (5) years of Commission approval of A-5-NPC-03-141.

- B. The permittee shall undertake development in accordance with the approved final plan and agreement. Any proposed changes to the approved final plan or agreement shall be reported to the Executive Director. No changes to the approved final plan or agreement shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

4. Timing--Biological Resources

As proposed by the applicant, to avoid adverse impacts to the California gnatcatcher, construction and maintenance activities associated with the water quality improvements authorized pursuant to A-5-NPC-03-141 shall not occur on the seaward side of Pacific Coast Highway between Los Trancos Creek and Muddy Creek during the gnatcatcher nesting season (April 15 through September 1).

5. Staging--Biological Resources

As proposed by the applicant, to avoid adverse impacts to sensitive species and habitat areas, staging and parking for the water quality improvements authorized pursuant to A-5-NPC-03-141 shall be located within existing developed or non-native, ornamentally landscaped areas. No equipment, materials or vehicles shall be stored within native habitat areas.

6. Public Access

As proposed by the applicant, to avoid adverse impacts on public access and recreational use of area beaches resulting from Pacific Coast Highway lane closures, all project operations associated with construction of the water quality improvements authorized pursuant to A-5-NPC-03-141 shall be prohibited during the "peak use" beach season, defined as the period starting the day before the Memorial Day weekend and ending the day after the Labor Day weekend of any year. During the off-peak season (the remainder of the year), the following restrictions shall apply:

- At least one lane shall remain open in each direction along Pacific Coast Highway during the hours of 7:00 a.m. and 7:00 p.m on weekdays;
- At least two lanes shall remain open in each direction on weekends; and
- Construction staging areas and employee parking shall not displace public beach and recreational parking on weekends.

7. Area of Potential Archaeological Significance

- A. The applicant shall comply with all recommendations and mitigation measures contained in the Historical Property Survey Report prepared for the project by Caltrans dated June 2003.
- B. If an area of cultural deposits is discovered during the course of the project:
 - (i) All construction shall cease and shall not recommence except as provided in subsection C hereof; and
 - (ii) Within 90 days after the date of discovery of such deposits, the applicant shall provide evidence to the Executive Director of execution and recordation of a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing all Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the applicant's entire parcel or parcels. It shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes – or any part, modification, or amendment thereof – remains in existence on or with respect to the subject property.
- C. An applicant seeking to recommence construction following discovery of the cultural deposits shall submit a supplementary archaeological plan for the review and approval of the Executive Director. In order to protect archaeological resources, any further development may only be undertaken after the supplementary archaeological plan has been approved and only consistent with the provisions of the approved plan.
 - (i) If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after the Executive Director receives evidence of recordation of the deed restriction required above.

- (ii) If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission to adopt the Supplementary Archaeological Plan as part of this permit or otherwise authorize recommencement of development and the Executive Director receives evidence of recordation of the deed restriction required above.

IV. **FINDINGS AND DECLARATIONS**

The Commission hereby finds and declares:

A. **Project Location, Description, and Background**

1. Project Location

The project site is located within the right-of-way along both sides of State Route 1 (Pacific Coast Highway) between Los Trancos Creek and Muddy Creek in the Crystal Cove area of the Newport Coast Planned Community, Orange County (Exhibits 1 and 2). Within the subject area, the Newport Coast Planned Community is located immediately inland of Pacific Coast Highway and Crystal Cove State Beach is located immediately seaward.

2. Project Description

The California Department of Transportation (Caltrans) was granted a permit by the County of Orange for drainage improvements within the right-of-way along both sides of Pacific Coast Highway (PCH). Project plans are included as Exhibit 3. The proposed drainage improvements are intended to comply with the Regional Water Quality Control Board's Cease and Desist Order (CDO) 00-87, which requires the elimination of direct discharge of waste into the Crystal Cove ASBS. The project includes abandonment of existing storm drain facilities that drain directly to Crystal Cove State Park and construction of new storm drain facilities that collect and convey runoff to Los Trancos Creek and Muddy Creek. Within the roadway width, the abandoned pipes will be slurry sealed. However, beyond the roadway (within the boundary of the State Park) the pipes and associated energy dissipaters will be left in place.

The project includes the installation of new inlets and 600mm (1.97 ft.) drainage pipes along both sides of the roadway and the creation of bioswales along the northeast (inland) side of PCH. A "bioswale" is described by the applicant as a 2.4 meter (7.9 feet) wide *"shallow, grass lined, flat bottomed channel that conveys storm water at moderate slopes to allow pollutant removal from highway storm water runoff."* The bioswales are proposed for areas between Muddy Creek and Reef Point Drive, between Reef Point Drive and Crystal Heights Drive, and between Crystal Heights Drive and Los Trancos Creek. No bioswales are to be constructed on the seaward side of PCH. Due to the slope of the roadway, almost all surface runoff leaving PCH upcoast of Crystal Heights Drive will drain to the bioswales along the inland side of the highway. Downcoast of Crystal Heights Drive, approximately half of the runoff from PCH will drain to the inland side of the highway and half will drain to the seaward side. The runoff from the seaward side of PCH (downcoast of Crystal Heights Drive) will be piped to the inland side of PCH and discharged into Muddy Creek. Curb openings will be constructed at 50 meter (164 foot) intervals and each bioswale will be a minimum 30 meters (98.4 feet) in length. A native seed mix will be used

to establish vegetation within the bioswale areas. Construction will occur between Fall 2003 and Spring 2004, during the off-peak beach use season. In accordance with Caltrans requirements, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared by the contractor prior to commencement of construction.

After consideration of various alternatives to satisfy the CDO requirement, Caltrans concluded that the proposed bioswale design on the inland side of the highway would provide treatment of runoff to the Maximum Extent Practicable (MEP), while avoiding impacts to potential environmentally sensitive habitat areas (ESHA) at Crystal Cove State Park. The applicant considered the creation of bioswales on the seaward side of the highway, but determined that coastal sage scrub would be adversely impacted as a result. The applicant also evaluated structural alternatives, such as installation of a Continuous Deflection System (CDS) unit or catch basin filter inserts. These options were dismissed, as they could not accommodate flooding. Due to public safety concerns, Pacific Coast Highway cannot be subject to flooding hazards.

3. Background

The County of Orange Planning Commission approved Local Coastal Development Permit No. PA02-0112 on March 13, 2003. Within ten working days of receipt of the notices of final action, two Coastal Commissioners and Orange County Coastkeeper appealed the approval on the grounds that the approved project does not conform to the requirements of the Newport Coast certified Local Coastal Program and the public access policies of the Coastal Act. At its hearing of May 6, 2003, the Commission determined that the local government's approval of the proposed development raised a substantial issue of consistency with the Newport Coast certified Local Coastal Program and the public access policies of the Coastal Act. The major issues addressed in the Substantial Issue staff report were water quality and public access.

B. Adoption of Substantial Issue Findings

The findings and declarations set forth in the substantial issue staff report (including Sections III and IV, as well as Section II) are herein incorporated by reference. The substantial issue staff report discusses several issues raised by the appellants that staff recommended did not raise a substantial issue regarding consistency of the project with the certified LCP. The citations to Sections 30230 and 30231 of the Coastal Act do not constitute valid grounds for appeal because those policies were not incorporated into the certified LCP and are not considered public access policies.

C. Standard of Review

The action currently before the Commission is the de novo portion of the appeal. The Commission's finding of Substantial Issue invalidated the locally issued coastal permit.

Pursuant to Section 30604(b) of the Coastal Act, the Commission's standard of review for the proposed development is the certified Local Coastal Program (LCP). Pursuant to Section 30604(c), the proposed project is also subject to the Chapter 3 public access and recreation policies of the Coastal Act due to impacts occurring seaward of Pacific Coast Highway, the first public road, via Los Trancos Creek and Muddy Creek. Runoff from the project site will be discharged to these creeks, thereby resulting in potential impacts on the public's access and recreational opportunities. Additionally, pursuant to Section 30605, a portion of the proposed project is subject to review under the certified Crystal Cove Public Works Plan (PWP). Due to their location within Crystal Cove State Park, the abandonment of drainage facilities must be evaluated in accordance with the PWP.

The Crystal Cove PWP was approved by the Commission on May 20, 1982 and recently amended on June 11, 2003. When a proposed project is contained in sufficient detail in a certified public works plan, the coastal development permit process is superceded by the public works process. If a project is not included in the certified public works plan, then a coastal development permit from the Commission is required. The Commission finds that the proposed project (abandonment of drainage facilities) was not previously contemplated and is therefore not contained in the PWP. As such, the Coastal Act will serve as the standard of review for the portion of the proposed project that is occurring within the State Park, with the Crystal Cove Certified PWP serving as guidance.

D. Consistency with Coastal Act Policies and Newport Coast Certified LCP

Coastal Act Section 30210 states,

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act Section 30220 states,

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Coastal Act Section 30240(b) states,

Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The Newport Coast certified LCP designates the coastal waters, streams, wetlands and estuaries as environmentally sensitive habitat areas (ESHA). The definition of ESHA is found in Section I-3 Resource Conservation and Management Policies and reads as follows: *“For purposes of Section 30107.5 of the Coastal Act, natural drainage courses designated . . . on the USGS 7-minute series map, Laguna Beach Quadrangle, . . . (hereafter referred to as “USGS Drainage Courses), coastal waters, wetlands, and estuaries are classified as “Environmentally Sensitive Habitat Areas” (ESHAs).”* The LCP recognizes that the habitat value of various streams, and along the length of individual streams, is not equal. The coastal waters also have a different habitat value. For this reason, four categories of ESHA were established in the Newport Coast LCP to denote the differing habitat values. The streams are designated either Category “A”, “B”, or “D” and the coastal waters are Category “C” ESHA. The current project involves potential impacts to ESHA Category C, which includes coastal waters. The protection of the ESHA Category C directly impacts public access and recreation.

Newport Coast LCP page I-2.5 states,

c. ESHA Category C:

The coastal waters along The Newport Coast—ESHA Category C—have been designated as both a Marine Life Refuge and an Area of Special Biological Significance. They contain near shore reefs, rocky intertidal areas and kelp beds, and are located primarily within Crystal Cove State Park. The State Department of Parks and Recreation will be responsible for providing protection for tidepools and other marine resources from park users.

Protection of water quality is provided by the Runoff Policies.

The Newport Coast certified LCP contains general “Runoff Policies” relating to peak flood discharge rates and erosion control. The LCP also contains policies relating to Erosion, Sediment and Grading. With respect to erosion and urban runoff control associated with the protection of marine water quality in particular, the LCP states the following:

Marine water quality will be protected by directing runoff to natural drainage courses such as Los Trancos Canyon, Buck Gully, and Muddy Canyon....and by means of erosion control techniques to slow runoff so that habitat areas are protected from flows significantly in excess of natural rates of flow. Additional control of non-point sources will be implemented if necessary to comply with State, regional, and County standards.

The LCP contains the following policies relating to erosion and sedimentation during construction:

Areas of disturbed soil shall be reseeded and covered with vegetation; mulches may be used to cover ground areas temporarily, other mechanical or vegetative techniques to control erosion may be used where necessary. Native and/or appropriate non-native plant material selected for vegetation shall be consistent with LCP Subsection I-3-L-6.

Temporary mechanical means of controlling sedimentation such as hay bakes, earth berms and/or sand-bagging around the site, may be used as part of an overall Erosion Control Plan, subject to County approval.

The full text of the Newport Coast LCP Runoff, Erosion, Sediment and Grading policies is provided as Exhibit 9.

Newport Coast LCP page I-3.21 states,

CATEGORY “C” ENVIRONMENTALLY SENSITIVE HABITAT AREA POLICIES

The protection of water quality in marine resource areas is subject to the authority of the State Water Resources Control Board. Protection of water quality is provided by the LCP Runoff Policies and will be reviewed by the Regional Water Quality Control Board in conjunction with subsequent coastal development permits and related environmental impact reports (EIR's).

A water quality monitoring program shall be submitted to the Regional Water Quality Control Board prior to initial implementing approvals for the golf course, for the purpose of monitoring runoff entering the ocean as well as the riparian corridors. Copies of the results of the monitoring program shall be forwarded to the Regional Water Quality Control Board and the County of Orange on a regular basis for their review to determine whether corrective action is required pursuant to the authority of said agencies.

Use and application of chemicals on the golf course and other landscape areas shall be limited to those approved by State, County, and Federal agencies. The landowner shall be responsible for notifying tenants and/or prospective initial purchasers of this requirement.

1. Effectiveness of Treatment

The project approved by the County of Orange contained no specific information regarding how various pollutants will be treated. The applicant has since provided additional information regarding the effectiveness of the treatment proposed. For comparative purposes, Caltrans provided information regarding the performance of six bioswales pilot

tested for three wet seasons in southern California. As demonstrated in the pilot projects, 76% to 89% of the heavy metals (total dissolved copper, lead and zinc) were removed by the bioswales. The applicant also submitted the California Stormwater Quality Association Stormwater Best Management Practice Handbook—New Development and Redevelopment, which provides a BMP fact sheet for vegetated swales (Exhibit 4). The fact sheet provides additional bioswale performance information data that is consistent with the Caltrans data for removal of metals and total suspended solids (TSS) in their pilot projects. The Caltrans examples demonstrated that the bioswales decreased the concentrations of total petroleum hydrocarbons (TPH) Oil and TPH Diesel by 51% and 69%, respectively. However, according to the applicant, no conclusions were drawn on general TPH removal performance because the samples were collected using the grab method, which may not produce representative results. According to Caltrans, *“the actual TPH removal rates were significantly higher than the actual concentration reduction rates because approximately 47% of the runoff infiltrated. The low influent concentrations (mean EMCs= <0.05mg/L to 3.5 mg/L) were not surprising because oil/grease concentration from highway runoff are typically around 10mg/L or less.”* The applicant has indicated that the proposed bioswales will be able to treat, infiltrate or filter the amount of storm water runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.

One of the appellants (OC CoastKeeper) maintains that more can be done to effectively treat a greater amount of runoff within the project area. For example, according to the appellant, vaults with media filters could be installed along the inland side of the highway to filter runoff prior to discharge into the creeks. As described on page 10, the applicant considered various alternative treatment methods, including installation of a CDS unit and media filters. However, due to flooding concerns, these alternatives were rejected.

At the time of Substantial Issue, it was unclear what specific plant mix the applicant proposed for use within the bioswales. The applicant has since provided a list of drought-tolerant native grasses that grow best during the winter and spring seasons in Southern California (Exhibit 5). The applicant intends to hydroseed the site between December and February. According to the applicant, if the seed mix is planted immediately prior to a storm, proper vegetation establishment will take approximately three months.

2. Quantity and Type of Runoff Treated

Based on information in the administrative record, the quantity of stormwater and non-stormwater runoff that would be treated in the biofiltration swales was unclear. According to information since provided by the applicant, approximately 61% of runoff from this segment of Pacific Coast Highway (between Los Trancos Creek and Muddy Creek) will be treated as part of the proposed project (Exhibit 7). Although this is not 100% treatment, it is a vast improvement over what currently exists. The applicant states that the remaining

39% of runoff can not be treated because there is insufficient area to construct a bioswale on the seaward side of PCH, without impacting CSS habitat outside of their right-of-way. Additionally, according to the State Water Resource Control Board's Federal Clean Water Act Section 303(d) List, the pollutants of concern in this area are fecal coliform and total coliform, not pollutants typically associated with runoff from highways, such as oil and grease. Pathogenic organisms, such as those whose presence is indicated by the presence of coliform bacteria, are not expected to be associated with the highway runoff because they are a bacteria associated with animal and human waste. Common sources of pathogens are livestock and pet feces carried by runoff into storm drains, and faulty septic systems. All highway runoff entering the bioswales will be stormwater runoff. No nuisance flows (such as irrigation) will enter the drainage inlets within the project area. As such, if coliform contamination of the beaches downcoast of Los Trancos and Muddy Creek occurs, it is likely due to the other sources of pollution, not the roadway.

3. Maintenance

The approved project will result in the collection and conveyance of polluted runoff in newly created drainage facilities, including multiple inlets and bioswales. However, at the time of local approval, no information was provided regarding cleaning and maintenance of the drainage facilities, particularly the bioswales. Although infiltration is anticipated, some pollutants and debris may collect and pond within the swale areas. An on-going cleaning and maintenance program must be implemented to assure that pollutants are removed and are not discharged into the creeks, and ultimately the ocean. The applicant intends to follow the guidelines set forth in the Caltrans Maintenance Manual. Appendix B of the Caltrans Statewide Storm Water Management Plan and Section 2 of the Caltrans Statewide Storm Water Quality Practice Guidelines provide a complete list of maintenance and operational best management practices that Caltrans intends to employ. The applicant has also submitted detailed information regarding maintenance operations specific to bioswales (Exhibit 6). According to the Caltrans Guidelines for Maintenance of BMPs, including Vegetated Treatment Systems (bioswales), the sites will be inspected a minimum of twice a year. Greater maintenance frequencies may be required depending on the particular site and level of traffic. Inlet inspection will occur annually. Caltrans District staff has indicated that maintenance of the proposed water quality improvements at the Crystal Cove site will occur more frequently. Special Condition 2 requires the applicant to maintain the facilities according to the final WQMP approved by the Executive Director to ensure that the improvements are carried out as proposed, in compliance with the Runoff policies of the LCP.

4. Monitoring

At the Substantial Issue stage, concerns were raised regarding monitoring of runoff from Pacific Coast Highway. No monitoring was proposed or required as part of the locally approved project. Appellants asserted that monitoring is necessary to evaluate the

effectiveness of the proposed BMPs and the quality of the water entering Los Trancos and Muddy Creek.

The Irvine Community Development Company (ICDC) operates monitoring stations at Los Trancos Creek and Muddy Creek to monitor runoff from Planning Area 3A of the Newport Coast Planned Community (required as a condition of approval of Commission issued permit #A-5-IRC-99-301). The ICDC has expressed concern that the redirection of PCH runoff resulting from the proposed project will affect the sampling results at the Los Trancos monitoring station. As such, the ICDC may request to relocate the monitoring station upstream. If relocation is proposed that involves development or is inconsistent with ICDC's existing permit, a subsequent permit or amendment will be required. Consideration of such a permit or amendment will acknowledge the impacts of the current Caltrans work.

Caltrans maintains that monitoring is not necessary in the current project because monitoring would not provide any new, relevant information beyond that collected at other bioswale sites in Southern California. The runoff characteristics provided by Caltrans show typical highway runoff that can be expected with the traffic volumes along this segment of Pacific Coast Highway. Based on runoff data provided, the type and quantity of pollutants anticipated to be found in the highway runoff differ from pollutants associated with beach closures. As stated previously, the pollutants of concern in this area are fecal coliform and total coliform, which are not expected to be found in highway runoff.

Pollutants contained in runoff from residential developments are generally not the same as those associated with highway runoff. Pollutants typically contained in highway runoff have not contributed to beach contamination and/or closure in the subject area. According to information provided by the applicant, the County of Orange Health Care Agency and Sanitation District have been testing the coastal waters for the past 30 years. The County runs tests to determine if bacteria are present and to identify the possible presence of disease causing organisms. The County Health Care Agency reviews the data to determine if there is an indication of contamination in the ocean waters and furthermore to advise the public regarding beach closures. According to information provided by the County of Orange Health Agency on their website, there were no reports of beach closures within the proposed project area in the past 3 years. The information indicates that there were no beach closures while Caltrans was directly discharging runoff to the Area of Special Biological Significance (ASBS). Monitoring is not considered necessary to gauge the results of the proposed project, because the project can only improve existing conditions.

Because runoff from the residential development will differ from roadway runoff, it will be somewhat easier to determine if runoff from the roadway is adversely affecting the results of the Irvine Company's monitoring. However, because the applicant is not proposing new development, other than the water quality improvements, there is not a nexus to require monitoring. If the road were being widened or resurfaced, there may be such a nexus.

5. Conformance with CDO

The project was proposed in response to Cease and Desist Order 00-87 issued by the Regional Water Quality Control Board on November 16, 2000. The CDO requires the elimination of direct discharge into the Crystal Cove ASBS. In a letter dated September 27, 2002 (see Exhibit 8), the Regional Board states that *"it appears that the Caltrans Action Plan, submitted on May 14, 2002, when fully implemented in accordance with the schedule specified in the CDO will satisfy the requirements set forth in the CDO."* At the time the Commission found Substantial Issue, it was unclear if the project approved by the Water Board was the same as the project approved by the County. Caltrans has since provided evidence that the project approved by the County is *"essentially the same project which was submitted and approved by the RWQCB although the design has advanced since the time of the Board submittal."*

The Water Board letter indicates that Caltrans' discharge point to Los Trancos Creek will be upstream of the 'low flow diversion' structure which currently diverts non-storm water flows from Los Trancos Creek to a nearby Orange County Sanitation District sewer trunk line that flows to their treatment plant where the water is treated and disposed. Nowhere in the County's administrative record did it indicate that low flows would be diverted. Caltrans now states *"[t]he existing low flow diversion system at the end of pipe at the Los Trancos Creek outfall was constructed by the Irvine Community Development Company for their plan of action to comply with the same Cease and Desist Order."* Because the applicant is not responsible for the low flow diversion system, they are not relying on its effectiveness to satisfy their requirements under the CDO. Nonetheless, Caltrans will benefit from the presence of the year round low storm water flow diversion system at Los Trancos.

The Water Board letter states *"the majority of low flows (non-storm water discharges) leaving Pacific Coast Highway in this area will be directed to a 'biofiltration swale' prior to discharge to Los Trancos and Muddy Canyon Creeks."* However, it was unclear at the Substantial Issue phase how the Water Board determined that a "majority" would be directed to the bioswales. Based on the written information and project plans included in the County's record, there was no way to determine the precise quantity of runoff entering the bioswales. The Commission has since received additional information regarding the amount of runoff directed to the bioswales. As described under subsection D (2) above, the bioswales will capture and treat approximately 61% of runoff. This represents an improvement over current conditions and satisfies the Water Board's CDO requirements.

6. Conclusion Regarding Substantial Issue Concerns

In all, the water quality measures proposed by the applicant are consistent with the regulations governing the project as described above and respond to the concerns raised at the Substantial Issue hearing. If constructed and maintained pursuant to the plans submitted by the applicant, the proposed bioswales will effectively treat a majority of runoff

from Pacific Coast Highway between Los Trancos and Muddy Creek. Over recent months, the applicant has submitted a multitude of drawings, maps, calculations, case studies, and various technical documents, including the Caltrans Statewide Storm Water Quality Practice Guidelines (May 2003) and the Caltrans Storm Water Quality Handbooks (March 2003) to describe their proposed BMPs, maintenance information, SWPPP guidelines and other pertinent information. Many of the submittal documents contain general information regarding Caltrans protocol. Some site-specific information has also been provided to supplement the procedural guidance documents. While the information is comprehensive and responds to the concerns raised at the Substantial Issue hearing, a more concise Construction Plan and WQMP document must be prepared in order to provide additional clarity and to facilitate compliance. The applicant must submit a consolidated document to outline the proposed site-specific construction and post-construction water quality measures.

To ensure that construction is carried out in conformance with the protocols and guidelines referenced throughout the applicant's submittal, the Commission imposes Special Condition 1. Special Condition 1 requires the applicant to submit a consolidated Construction Best Management Practices Plan for the project site. The Construction Best Management Practices Plan for the project site must be prepared by a licensed professional, and shall incorporate erosion, sediment, and chemical control Best Management Practices (BMPs) designed to minimize to the maximum extent practicable the adverse impacts associated with construction to receiving waters in order to make the project comply with the Runoff, Erosion, Sediment and Grading policies of the certified LCP.

To ensure that the project is operated and maintained in conformance with the protocols and guidelines referenced throughout the applicant's submittal, the Commission imposes Special Condition 2. Special Condition 2 requires the applicant to submit a consolidated Water Quality Management Plan (WQMP) for the post-construction project site. The WQMP must be prepared by a licensed water quality professional, and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to minimize any increases in volume and velocity of storm water leaving the developed site in order to make the project comply with the Runoff, Erosion, Sediment and Grading policies of the certified LCP.

7. Issues Not Raised at Time of Substantial Issue Hearing

Inspection and Restoration of State Parks Property

The project involves the abandonment of drainage facilities located beyond the highway right-of-way on State Parks property at Crystal Cove State Beach. The outlet areas to be abandoned contain concrete headwalls and erosion control devices (e.g. riprap) on the bluffs above the beach. State Parks and Caltrans have initiated discussions regarding removal of these outlet devices and restoration of the sites. At this time, an agreement has not been reached regarding timing and/or method of removal and restoration. Caltrans

indicates that the restoration project cannot be accommodated as part of the currently proposed water quality improvement effort due to timing constraints of the CDO. The sites of the outlets to be abandoned are sloping areas containing coastal sage scrub habitat, a potential ESHA. Caltrans has indicated that use of heavy equipment to fully remove the drainage facilities would disturb ESHA and potentially de-stabilize the slope. As such, careful consideration of the method of removal and/or site restoration would be necessary. The Commission would have the opportunity to review any proposed restoration effort through a future specific project request or coastal development permit.

However, until such time as a restoration effort is undertaken, proper inspection and monitoring of the facilities is necessary. For example, if the abandoned pipes were to fall into disrepair (i.e. become cracked, caved in, etc.), they could convey water to the slope, thereby causing erosion at the mouth of the outlet points. Additionally, the riprap boulders may become dislodged, requiring removal or restacking. The Commission imposes Special Condition 3, which requires the applicant to submit an interim inspection and maintenance plan for the areas where Caltrans storm drains have been abandoned seaward of the highway at Crystal Cove State Park. The plan shall include a schedule for periodic inspection of the abandoned facilities and surrounding outlet areas and a response outline for maintenance and/or repair activities to be implemented if facilities are causing adverse impacts.

To memorialize Caltrans' offer to evaluate restoration of the sites of the abandoned drainage facilities, Special Condition 3 requires the applicant to submit a restoration agreement in consultation with State Parks prior to issuance of the permit. Restoration shall consist of removal of riprap and revegetation with native species appropriate to each site. Restoration efforts must be carried out within five years of the date of Commission approval of A-5-NPC-03-141. As conditioned for interim inspection and maintenance and future restoration, the Commission finds the project consistent with Section 30240(b) of the Coastal Act.

Timing of Construction to Avoid Gnatcatcher

The proposed project will occur adjacent to coastal sage scrub habitat located along the seaward side of Pacific Coast Highway. This area is known to support California gnatcatchers and may be considered an Environmentally Sensitive Habitat Areas (ESHA). Furthermore, this area is adjacent to a State Park. The Commission recently certified the Crystal Cove Public Works Plan (PWP) with a condition that requires ESHA to be protected against any significant disruption of habitat values, and only uses dependent on those resources can be allowed within those areas. To minimize any potential impacts to the potential ESHA, Caltrans proposes to schedule construction activities before and after the California gnatcatcher breeding season. To ensure that construction and maintenance activities do not adversely affect sensitive habitat areas, the Commission imposes Special Condition 4, which requires the applicant to comply with specific timing requirements, as proposed, to avoid the gnatcatcher breeding and nesting season (April 15—September 1).

The Commission finds the proposed development, as conditioned for appropriate timing, consistent with Section 30240 (b) of the Coastal Act.

Construction Staging

Construction storage and staging must be carried out in a manner that assures that native habitat areas are protected. As such, the Commission imposes Special Condition 5, which requires the applicant to store all equipment and vehicles in a previously developed or non-native landscaped location, consistent with the plans submitted.

The Commission finds the proposed development, as conditioned for appropriate construction staging, consistent with Section 30240 (b) of the Coastal Act.

Timing of Construction to Avoid Public Access Impacts

As described previously, the proposed project consists of water quality improvements that will ultimately provide a public benefit for residents and visitors. Construction impacts, such as obstruction of lateral vehicular access to the shoreline with road or lane closures, can affect the public's ability to access the beach, in conflict with Section 30210 of the Coastal Act. Construction related impacts can be partially alleviated by limiting construction work to the off-peak season (fall to early spring) when beach use by the public is typically low. With this in mind, Caltrans intends to carry out construction activities before and after the popular summer beach use season. Caltrans has also indicated that beach access will not be affected during construction, as only one lane (of the three traveling in each direction) will be closed during construction. To ensure that the proposed maintenance activities minimize impacts to continued public access, the Commission imposes Special Condition 6. The condition prohibits work that results in lane closures during the peak beach use period, as defined in the special condition. The Commission finds the proposed development, as conditioned, consistent with the public access policies of the Coastal Act.

Cultural Resources

According to a Historical Property Survey Report (HPSR) prepared by Caltrans, the site of the proposed work is within the vicinity of three previously identified archaeological sites. The HPSR requires a monitor on-site during construction. To ensure that cultural resources are not adversely impacted by the proposed work, the Commission imposes Special Condition 7. Special Condition 7 requires the applicant to submit for the review and approval of the Executive Director an archeological monitoring plan prepared by a qualified professional. As conditioned, the Commission finds the project consistent with the Archaeological and Paleontological Policies of the Certified LCP.

G. California Environmental Quality Act

Section 13096 of the Commission's Code of Regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the permit, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Commission incorporates its findings on conformity with LCP policies at this point as if set forth in full. For the reasons described in the Commission findings above, the proposed project, as conditioned, will not cause significant adverse impacts to the environment. Specifically, the Commission has required mitigation measures to enable the Commission to find the proposed project, as conditioned, consistent with the biological resources and water quality policies of the certified LCP. There are no feasible alternatives or mitigation measures available which would substantially lessen any significant adverse impact which the activity might have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.